

The following Listing of Claims replaces all prior listings, or versions, of claims in the above-captioned application.

Listing of Claims:

1. (Currently Amended) Nozzle body for a liquid droplet spray device for nebulising a high-viscous liquid substance having a viscosity of at least 4 mPas such as functional liquids, medicated or not, sanitizing or not, fragranced or not, comprising:

a first substrate in which a space is formed,

a second substrate having one or more nozzle membrane sections and reinforcement sections,

wherein said first and second substrates are arranged such to enclose the space,

wherein each nozzle membrane section comprises a high-density array of outlet nozzles and output channels that connect said enclosed space with each of said outlet nozzles, said outlet nozzles and said output channels having a tightly-toleranced, straight, non-tapered shape,

wherein said second substrate has a top surface in which at least one cavity is formed so as to provide said nozzle membrane section corresponding to the bottom of said cavity with surrounding reinforcement sections, and a bottom surface adjacent to and enclosing said space thus forming a chamber for containing said liquid substance,

wherein each nozzle output channel is step-shaped with a wider portion adjacent said space and a thinner portion containing a protrusion section protruding beyond the top surface of said nozzle membrane section of said second substrate such that the exterior side wall of the protrusion section of said output channel is at a substantially straight angle with respect to the top surface of said nozzle membrane section of said second substrate,

and-wherein said space consists of at least two sub-spaces separated by a flexible but leak-tight separation, each sub-space containing a different liquid to be ejected together

through said nozzle membrane section, and

wherein the different liquids are ejected from different outlet nozzles.

2. (Original) Nozzle body according to claim 1, wherein said high-density array corresponds to an array having at least 85 outlet nozzles for a nozzle membrane section of $500\ \mu\text{m}^2$.
3. (Original) Nozzle body according to claim 2, wherein said high-density array corresponds to an array having at least 169 outlet nozzles for a nozzle membrane section of $500\ \mu\text{m}^2$.
4. (Original) Nozzle body according to claim 2, wherein said high-density array corresponds to an array having at least 300 outlet nozzles for a nozzle membrane section of $500\ \mu\text{m}^2$.
5. (Previously Presented) Nozzle body according to claim 1, wherein the viscosity of said liquid substance is at least 5 mPas.
6. (Previously Presented) Nozzle body according to claim 1, wherein said first and second substrates are formed integrally from one substrate by machining.
7. (Previously Presented) Nozzle body according to claim 1, wherein said space consists of a soft porous medium for containing the liquid substance.
8. (Cancelled)

9. (Previously Presented) Liquid droplet spray device for nebulising a high viscous liquid substance, comprising:

a nozzle body according to claim 1, and

a vibrating element disposed to vibrate liquid in said space so as to eject said liquid substance as a spray through said outlet nozzles.

10. (Original) Liquid droplet spray device according to claim 9, wherein said vibrating element is attached to said nozzle body through removable attachment means.

11. (Previously Presented) Liquid droplet spray device according to claim 10, wherein said vibrating element is a piezoelectric element.

12. (Previously Presented) Liquid droplet spray device for nebulising a high viscous liquid substance, comprising:

a nozzle body according to claim 2, and

a vibrating element disposed to vibrate liquid in said space so as to eject said liquid substance as a spray through said outlet nozzles.

13. (Previously Presented) Liquid droplet spray device for nebulising a high viscous liquid substance, comprising:

a nozzle body according to claim 3, and

a vibrating element disposed to vibrate liquid in said space so as to eject said liquid substance as a spray through said outlet nozzles.

14. (Previously Presented) Liquid droplet spray device for nebulising a high viscous liquid substance, comprising:

a nozzle body according to claim 4, and
a vibrating element disposed to vibrate liquid in said space so as to eject said liquid substance as a spray through said outlet nozzles.

15. (Previously Presented) Liquid droplet spray device for nebulising a high viscous liquid substance, comprising:

a nozzle body according to claim 5, and
a vibrating element disposed to vibrate liquid in said space so as to eject said liquid substance as a spray through said outlet nozzles.

16. (Previously Presented) Liquid droplet spray device for nebulising a high viscous liquid substance, comprising:

a nozzle body according to claim 6, and
a vibrating element disposed to vibrate liquid in said space so as to eject said liquid substance as a spray through said outlet nozzles.

17. (Previously Presented) Liquid droplet spray device for nebulising a high viscous liquid substance, comprising:

a nozzle body according to claim 7, and
a vibrating element disposed to vibrate liquid in said space so as to eject said liquid substance as a spray through said outlet nozzles.

18. (Previously Presented) Nozzle body according to claim 1, wherein the flexible but leak-tight separation is a leak-tight vertical membrane.

19. (Previously Presented) Nozzle body according to claim 1, wherein the different liquids are ejected together through the same nozzle membrane section.